GreenPower An update from Western's Renewable Resource



An update from Western's Renewable Resources Program covering green power, reports and studies and funding.

Individuals or agencies sending press releases quoted here are entirely responsible for the accuracy of their information.

September 5, 2014

Contact us Subscribe

Green power

- Webinar Solar for All: Minimum Costs to Local Governments and Maximum Solar for Their Community
- o Webinar Valuing the Costs and Benefits of Solar
- Network with the Who's Who of the Geothermal Power Industry
- o Communities going into power business to cut cost, carbon footprint
- Four Cellulosic Ethanol Breakthroughs
- Registration Open for Renewable Energy Markets 2014
- The good news for solar that could be bad news for utilities (including much higher efficiency)
- New Content on Americans for a Clean Energy Grid Website

Reports and studies

- o New Reports Highlight Major Potential in Offshore Wind Energy
- o California tracks renewable energy growth
- o Report explores economic issues of increasing amounts of variable generation
- o Community Solar Scenario Tool: Planning for a Fruitful Solar Garden
- o Study: Wind Power Can Improve Resiliency Of Electrical Grids
- New Study Finds that the Price of Wind Energy in the United States Is at an All-Time Low, and the Competitiveness of Wind Has Improved
- DOE 2013 Wind Report now available
- Survey of Emerging Transmission Technologies

Funding

- DOE Modifies Tribal Funding Opportunity; Informational Webinar Posted Online
- Previous issues

Green Power

Webinar - Solar for All: Minimum Costs to Local Governments and Maximum Solar for Their Community

Wednesday, Sept. 17, 2014 2:00 PM - 3:00 PM EDT

ICLEI Local Governments for Sustainability U.S.A. presents the second part of the Members' Webinar Series highlighting best practices and innovative local solutions from the ICLEI member network. The next webinar will focus on Solar programs that are complimentary to ICLEI's Renewables Division as part of the DOE's SunShot Initiative. Save the date for September 17th at 2pm – 3pm. In this session, we will feature the city of Beaverton, Oregon's Solar on Reservoirs project, and Tompkins County, NY's solarize program. Read more. Source: International Council for Local Environmental Initiatives, 9/4/14

Webinar - Valuing the Costs and Benefits of Solar

Tuesday, Sept. 9, 2014 12:00 PM EDT

In this webinar the presenters will discuss the existing value of solar studies, highlight their strengths and weaknesses, and propose a value of solar framework that represents a fair and sustainable contribution of distributed solar PV. Read more. Source: Energy Central, 8/21/14

Network with the Who's Who of the Geothermal Power Industry

Every year, the Geothermal Energy Expo® hosts the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production and management. It provides a unique opportunity for exhibitors to showcase their projects, equipment, services and state of the art technology to the geothermal community. Read more. Source: Geothermal Resource Council, 9/3/14

Communities going into power business to cut cost, carbon footprint

Sonoma County, which enticed Americans to forsake factory-made food for artisan wines and farmers market produce, now wants consumers to reconsider another everyday commodity.

New on the menu: locally curated energy.

The county is at the forefront among eco-minded communities plunging into the power business nationwide.

Impatient with the pace at which states and the federal government are confronting climate change, communities from the coast of Massachusetts, Cincinnati, Chicago and Boulder, Colo., have begun taking steps to elbow aside big electricity companies and find green power themselves. Read more. Source: Los Angeles Times, 9/1/14

Four Cellulosic Ethanol Breakthroughs

Agricultural and forestry waste like corn stover and lawn clippings can be used as a source of sustainable fuel to power vehicles of all types—even racecars and airplanes. This non-food biomass contains the raw materials and molecular compounds needed to create cellulosic ethanol, a fuel source that has the potential to slash carbon emissions by more than 80% when replacing gasoline. Read more. Source: DOE Office of Energy Efficiency and Renewable Energy, 9/3/14

Registration Open for Renewable Energy Markets 2014

Discounted early registration is now open for this year's Renewable Energy Markets 2014 conference, taking place in Sacramento, California from December 2-4 and co-sponsored by the U.S. Environmental Protection Agency. Set in California's state capital, REM 2014 is geared towards attendees who share an interest in and commitment to promoting clean energy. Read more. Source: EPA Green Power Partnership, 8/28/14

The good news for solar that could be bad news for utilities (including much higher efficiency)

Online technology magazine MakeUseOf is out with an article summarizing why current utility customers may soon be generating their own electricity. If you think that solar is still too expensive to

be a threat to your utility... if you think it's only an issue in high-sun/high-cost areas like Hawaii and California... then I urge you to skim the three developments summarized below. The solar-friendly future may be closer than we think. Read more. Source: Smart Grid News, 8/20/14

New Content on Americans for a Clean Energy Grid Website

If you have not visited the Americans for a Clean Energy Grid website recently, you will have missed some of its new content. In particular, we would like to call your attention to a set of papers focused on new technologies that promise significant efficiencies and benefits for the transmission system, written by ACEG's summer intern, Usman Chaudhry, a University of Virginia electrical engineering student. Many are aware of the technical innovations that are changing the retail and distribution character of the grid, but are not aware that new transmission-level technologies will have their own profound effects. We welcome your comments on that and other aspects of the ACEG website, such as the refined definition of a "clean energy grid" that we have posted. Read more. Source: Americans for a Clean Energy Grid, 8/13/14

Visit U.S. DOE EERE Green Power Network for more information.

Reports, studies and policy

New Reports Highlight Major Potential in Offshore Wind Energy

The Energy Department today announced a new report showing steady progress for the U.S. offshore wind energy industry over the past year. The report highlights 14 projects in advanced stages of development, together representing nearly 4,900 megawatts (MW) of potential offshore wind energy capacity for the United States. Further, this year's report highlights global trends toward building offshore turbines in deeper waters using larger, more efficient turbines that increase the amount of electricity delivered to consumers. Read more. Source: DOE Office of Energy Efficiency and Renewable Energy, 9/3/14

California tracks renewable energy growth

The California Energy Commission is tracking progress toward achieving the state's renewables portfolio standards (RPS) for each compliance period. Also, the Energy Commission is tracking progress toward the 12,000 MW goal for renewable distributed generation, and the status of permitting and construction of new renewable energy facilities in California. Read more. Source: California Energy Commission, 9/4/14

Report explores economic issues of increasing amounts of variable generation

The Lawrence Berkeley National Laboratories has released <u>Strategies for Mitigating the Reduction in Economic Value of Variable Generation with Increasing Penetration Levels</u>.

The new "mitigation report" follows a "valuation report" that found a decline in the marginal economic value of different variable generation (VG) technologies with increasing penetration levels. Using the same model and data as the previous report, the new study evaluates individual options that have the potential to stem the decline in the marginal value of VG with increasing penetration levels. Source: Lawrence Berkeley Laboratories, 9/2/14

Community Solar Scenario Tool: Planning for a Fruitful Solar Garden

Presentations from <u>Community Solar Scenario Tool</u> are now available online. The webinar was hosted by NREL's Solar Technical Assistance Team and the DOE SunShot Initiative.

You can download a recording of the webinar, along with the slides, and other presentations from our Do-It-Yourself Solar Market Analysis summer series. Source: National Renewable Energy Laboratory, 8/31/14

Study: Wind Power Can Improve Resiliency Of Electrical Grids

A new frequency response study from GE's Energy Consulting business found that when equipped with the appropriate modern plant controls, wind applications could substantially enhance grid resiliency.

Using the U.S.' Eastern Interconnection as a model, the study addressed questions about how the U.S. electrical systems would respond to a large-scale interruption of generation, such as multiple power plants tripping offline. Such an event could result in significantly lower frequencies on the system, customer interruptions or even large-scale blackouts, notes GE. Read more. Source: North American Windpower, 8/27/14

New Study Finds that the Price of Wind Energy in the United States Is at an All-Time Low, and the Competitiveness of Wind Has Improved

Wind energy pricing is at an all-time low, according to a new report released by the U.S. Department of Energy and prepared by Lawrence Berkeley National Laboratory (Berkeley Lab). The prices offered by wind projects to utility purchasers averaged just \$25/MWh for projects negotiating contracts in 2013, spurring demand for wind energy.

"Wind energy prices—particularly in the central United States— are at an all-time low, with utilities selecting wind as the low cost option," Berkeley Lab Staff Scientist Ryan Wiser said. "This is especially notable because, enabled by technology advancements, wind projects have increasingly been built in lower wind speed areas." Read more. Source: Lawrence Berkeley Laboratories, 8/18/14

DOE 2013 Wind Report now available

Get the facts on the U.S. wind industry at a glance. Read more. Source: DOE EERE Wind Program, 8/18/14

Survey of Emerging Transmission Technologies

On August 14, 2003, the United States experienced the worst electrical blackout in its history. About 50 million people lost power for up to two days, the cost of the blackout was estimated at \$6 billion, and worse, at least 11 people lost their lives. The nature of the blackout was a "cascading failure," where the failure of one high voltage transmission line overloaded other high voltage transmission lines in different parts of the electric grid, causing them to overheat and fail themselves. With multiple high voltage transmission lines down, electricity produced by power plants in the region had nowhere to go, and they were forced to shut down. Read more. Source: Americans for a Clean Energy Grid, 7/9/14

Find more <u>publications and webinars</u>.

Funding

DOE Modifies Tribal Funding Opportunity; Informational Webinar Posted Online

The DOE Tribal Energy Program, in conjunction with the DOE Office of Indian Energy, is accepting applications for up to \$7 million in funding to accelerate clean energy development on tribal lands.

Through this funding opportunity announcement (FOA), DOE is soliciting applications under two topic areas:

- Install clean energy and energy efficiency retrofit projects for tribal buildings
- Deploy clean energy systems on a community scale

Since the initial FOA on July 17, 2014, DOE has issued two modifications to its solicitation. Visit the EERE Exchange website to view the <u>modifications</u>.

An informational webinar on the FOA was held Thursday, Aug. 14, 2014, which highlighted essential details about the FOA application process, including:

- Types of applications sought
- Who is eligible to apply
- Cost share and other requirements
- What the application needs to contain
- How to ask questions
- How applications will be selected for funding.

For those who were not able to attend the live webinar, the <u>presentation slides</u> and a <u>video</u> of the webinar are available on the Tribal Energy Program website.

View the complete FOA on the <u>funding opportunity page</u>. Reference DE-FOA-0001021. *Source: DOE Tribal Energy Program, 8/20/14*

Find more funding sources.